



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,114	09/20/2001	Andrew Bartlett	MCA-460 PC/US	4663
25182	7590	09/08/2004	EXAMINER	
MILLIPORE CORPORATION 290 CONCORD ROAD BILLERICA, MA 01821			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/937,114	Applicant(s) BARTLETT ET AL.	
	Examiner Krishnan S Menon	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-15,18,19 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-15,18,19 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1,2,4-15, 18,19 and 27 are pending.

#### ***Claim Rejections - 35 USC § 112***

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While there is disclosure for the gasket formed through the screen (feed or filtrate screen) in page 6, 3<sup>rd</sup> and 4<sup>th</sup> paragraph, and figures 1,2, 4 and 6, the newly added element in claim 1 in the amendment of 4/16/04, and subsequently amended in the present amendment to read "said one or more seals being formed through the filter", does not seem to have disclosure in the specification or claims as originally filed.

Examiner read through the cited section of the specification, from page 3 lines 14 to page 4 line 22, but could not find any disclosure to support the claim "... seals being formed through the filter". There is support for seals being formed through the 'screen', 'filtrate layer' (which is a screen – page 4, last Para), 'screen layer' and 'feed layer', but none of these would be 'filter' (or membrane) as defined by the applicants. Figure 4, for example, shows the membrane straddled by feed and filtrate screens, and the gasket is formed through the feed and filtrate screens, not the membrane (or filter). Similarly, fig 6 shows gasket around the openings of feed and filtrate screens 51 and 54, but no

Art Unit: 1723

gasket around the opening of the membrane 53. While a screen could be used as a filter, in the present application, the applicants have shown discrimination between the screen and the filter (or membrane). The screen is used as a spacer between layers of filter (or membrane) and does not perform the filtration function. Accordingly, there is no disclosure for the claim "seals formed through the filter". In fact, there is no disclosure for seals formed around the opening of the filter at all. Seals are shown as formed only around the openings of the spacer (screen) layers.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 2,4, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wyatt et al (US 3,679,059).

Wyatt teaches a screen for a filter device as in claim 2, and a module as in claim 10, with the screen having one or more ports on the edges (see figures 1 and 2), integral gaskets formed through the screen around the ports, and the thickness of the gaskets extend from the screen layer as in claims 10 and 13 (col 1 lines 60-67), formed from thermoplastic elastomers, etc, as in claims 4, 10, and 14 (col 1 lines 1-75)

2. Claims 9, 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as being unpatentable over Wyatt et al (US 3,679,059).

The gasket being formed by injection molding is product by process claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re *Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Re Claim 18 and 19, varying the height of the gasket would inherently vary the channel height of the feed or filtrate layer. Wyatt teaches setting the channel height by the spacer mesh and gasket (col 1 lines 35). The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. "The inherent teaching of a prior art reference, a question of fact, arises both in the context of anticipation and obviousness." In re *Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995) (affirmed a 35 U.S.C. 103 rejection based in part on inherent disclosure in one of the references). See also In re *Grasselli*, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983).

3. Claim 27 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Oshida et al (US 5,552,047).

Art Unit: 1723

Oshida teaches a filtration cartridge having a recess formed around a circumference and integral seal in the recess of elastomeric material as claimed – see figure 1-3, and col 2 lines 14-35.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 USC 103(a) as unpatentable over Van Hoek et al (US 2,758,083) in view of Wyatt et al (US 3,679,059).

Claim 1 recites a filtration device comprising one or more filter layers, with the filter as having one or more openings around which a fluid tight seal is formed by an integral seal that is formed through the filter, with thickness greater than the filter, and made of an elastomer. Van Hoek teaches a filtration (electrodialysis) device with filter membranes having openings which are sealed around – see figures 2-9. Van Hoek does not teach the holes as having seals around that is integrally formed with elastomeric materials. Wyatt teaches holes around the filter screens (fig 1 and 2) which are sealed by integrally formed elastomeric seals. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Wyatt in the

Art Unit: 1723

teaching of Van Hoek to improve the quality of the seal, reduce the cost and for applications like dialysis, reverse osmosis, etc. (see Wyatt col 1 line 1 – col 2 line 17).

5. Claims 5-8, 11 and 12 are rejected under 35 USC 103(a) as unpatentable over Wyatt et al (US 3,679,059).

Wyatt teaches all the limitations of claims 2 and 10. Instant claims 5-8, 11 and 12 add the extension of the seals above the surfaces of the screen, which Wyatt does not specify. However, it would be obvious to one of ordinary skill in the art at the time of invention that this extension depends on the need for a fluid-tight seal and could be optimized, as taught by Wyatt (col 1 lines 60-67). Discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. In re Boesch and Slaney, 205 USPQ 215 (CCPA 1980); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Aller, 42 CCPA 824, 220 F.2d 454, 105 USPQ 233 (1955).

### ***Response to Arguments***

Arguments are moot because of the new grounds for rejection.

### ***Conclusion***

This action is in response to an RCE filed 8/19/04. Since the rejections are based on new references, this action is made non-final.

Art Unit: 1723

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan Menon  
Patent Examiner

  
W. L. WALKER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700